CLAIMS

1. A method of routing an information packet from a source in a first autonomous system via a first label switched path to a destination in a second autonomous system via a second label switched path, the method comprising;

   at an interface between the autonomous systems, mapping the first label switched path on to the second label switched path.

2. A method of routing an information packet from a source router in a first autonomous system via a first label switched path to a destination router in a second autonomous system via first and second border routers at an interface between said first and second autonomous systems, wherein a border gateway protocol (BGP) is employed in which a label identifies both a forwarding interface for a packet and a forwarding behaviour at that interface so as to provide a mapping from said first label switched path on to a second label switched path to the destination in said second autonomous system.

3. A method as claimed in claim 1, wherein the destination router in the second autonomous system returns to the source router in the first autonomous system a two-label stack identifying first and second paths across the first and second autonomous systems respectively.

4. A method as claimed in claim 3, wherein said first label identifies a path from the source router to a border router in said first autonomous system, and said second label identifies a route from the source router to the destination router.

5. A method as claimed in claim 2, wherein said label identifies a next hop label switched path so as to identify an interface mapping.

6. A method as claimed in claim 3, wherein each router advertises new routes to reachable routers in its respective autonomous system via a BGP message.

7. a method as claimed in claim 4, wherein route information is encoded in a network layer reachability information (NLRI) element that is inserted in the BGP message.

8. A method as claimed in claim 7, wherein a said label is modified to change an egress label switched path of a said border router so as to provide a cross-connect function.

9. A method as claimed in claim 7, wherein said labels enable multiple diversion route storage at a said border router.

10. A method as claimed in claim 9, and including selection of routes from said stored multiple diversion routes so as to provide load balancing.

11. Software in machine readable form on a storage medium and arranged to perform a method as claimed in claim 2.

12. A communications network router controlled by software as claimed in claim 11.

13. A communications network comprised by a plurality of interconnected autonomous systems and in which information packets are routed from a source in a first autonomous system via a first label switched path to a destination in a second autonomous system via first and second border routers at an interface between said first and second autonomous systems, wherein the communications network employs a border gateway protocol (BGP) in which a label identifies both a forwarding interface for a packet and a forwarding behaviour at that interface so as to provide a mapping from said first label switched path on to a second label switched path to the destination in said second autonomous system.